The world is taking the nuclear option

Published 13 April 2026

Mobeen Tahir
Director, Macroeconomics and Thematic Research

Key Takeaways

- The US announcement to quadruple nuclear capacity by 2050 got markets excited last year.
- China's rapid expansion of nuclear capacity has created a blueprint for other countries.
- Many energy importers, including Japan, are building nuclear capacity to improve energy independence.

In November 2025, a few days before I'm due to head to Stockholm to meet investors, my Swedish colleague reaches out to share the news of his country lifting the ban on uranium mining that had been in effect since 2018. He also mentions Sweden's plans to build small modular reactors (SMRs). Nuclear energy is at the top of the agenda when we see investors. No wonder he is energised by the news. So am I.

While Sweden may not be the first country on people's radars when talking about nuclear energy, this decision is still very consequential for two key reasons. First, it symbolises how countries around the world are embracing nuclear energy after having shunned it for many years. Sweden has six operable reactors providing 30% of its electricity. It has, to date, shut down seven and currently has zero under construction. In June 2023, Sweden replaced its energy target of '100% renewable' electricity by 2040 with '100% fossil-free' electricity to pave the way for new nuclear plants1.

Second, Sweden has 27% of Europe's known uranium within its bedrock, making the commercial impact of this decision meaningful for both Sweden and uranium mining2. Uranium, the fuel for nuclear energy, is expected to be in tight supply relative to demand, incentivising more mining activity as prices go up.

Sweden is clearly not alone. In the face of rapidly rising energy needs from industries like artificial intelligence, countries are increasingly turning towards nuclear as a core baseload form of energy that can provide uninterrupted, emissions-free power at scale. Moreover, the war in Iran has further reinforced the need for countries to reduce their dependence on fossil fuels, not only for environmental reasons but also to reduce their exposure to geopolitical shocks and improve energy security. Nuclear energy, while not free of geopolitical risks like any industry with global supply chains, still offers a viable alternative. Its case, alongside other alternatives like renewable energy, has been further reinforced.

How WisdomTree Uranium and Nuclear Energy UCITS ETF (NCLR) aims to capture the opportunity

The WisdomTree Uranium and Nuclear Energy UCITS ETF aims to provide investors with access to the growth of uranium and nuclear energy.

Value chain approach:

The exchange-traded fund (ETF) targets the most value-accretive segments of the uranium and nuclear value chain, including those that may benefit from growth as nuclear energy adoption accelerates. This value chain consists of:

- Upstream activities (60% weight): Uranium mining and the production of other raw materials for nuclear reactors.
- Midstream activities (25% weight): Companies involved in uranium conversion, enrichment, fuel fabrication, and storage, as well as those supplying critical infrastructure, equipment, and services to the nuclear industry.
- Innovators (15% weight): Developing advanced technologies such as small modular reactors and conducting research and development in fusion technology.

By investing across the nuclear value chain, investors gain exposure to established sectors like uranium mining and midstream companies that play a critical role in making uranium ready for reactors. The strategy also includes innovators driving next-generation nuclear technologies, such as small modular reactors and fusion research, both poised for significant growth.

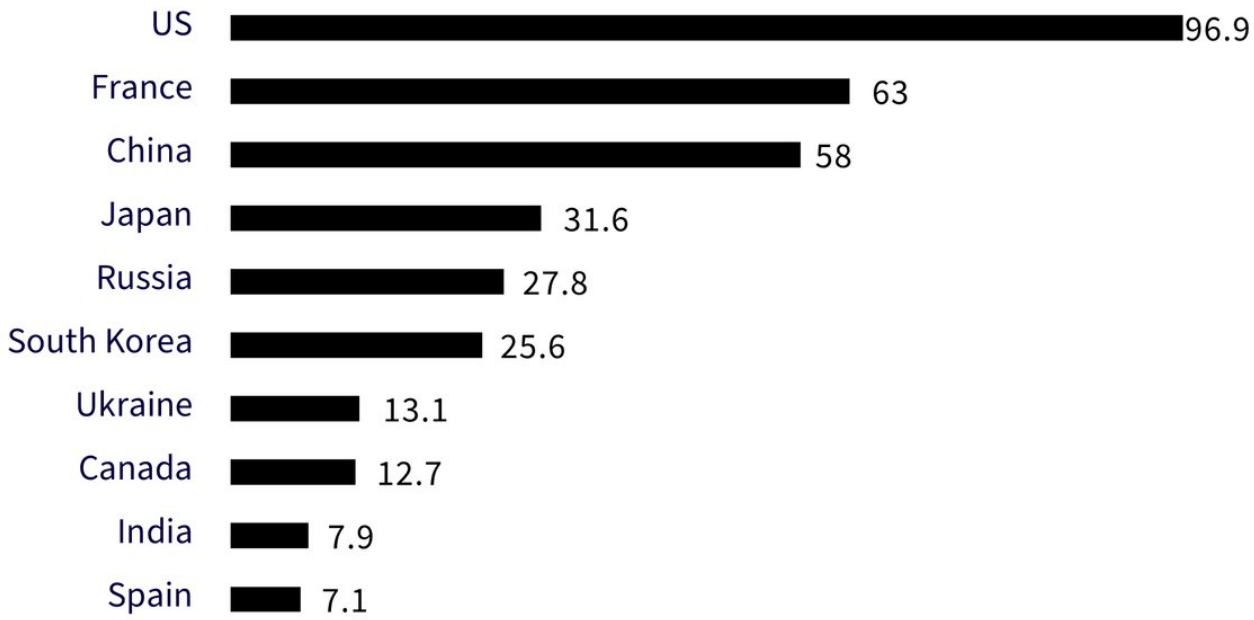
Focus on purity:

Stock selection and weighting are based on revenue exposure to the uranium and nuclear energy value chain. Upstream companies must derive at least 50% of their revenue from the theme, while midstream companies require a minimum of 10%. This threshold accounts for their strategic role in the value chain while acknowledging their diversified business models. Weightings are adjusted in favour of companies with higher revenue exposure, subject to caps and liquidity requirements.

What got everyone excited last year

While markets have been paying attention to the nuclear theme since 2024, when hyperscalers started announcing large nuclear energy deals to power their data centres, the big catalyst for the theme came in May 2025 when President Trump announced a series of executive orders aimed at quadrupling US nuclear capacity by 2050. Quadrupling the capacity of the world's largest producer in just 25 years is something markets found difficult to ignore. The executive orders further outlined that this will be achieved by building new large reactors, reopening or extending the lives of existing reactors, facilitating a more conducive regulatory environment, and investing in new technologies like SMRs.

Figure 1: Total operable reactor net capacity (MWe)



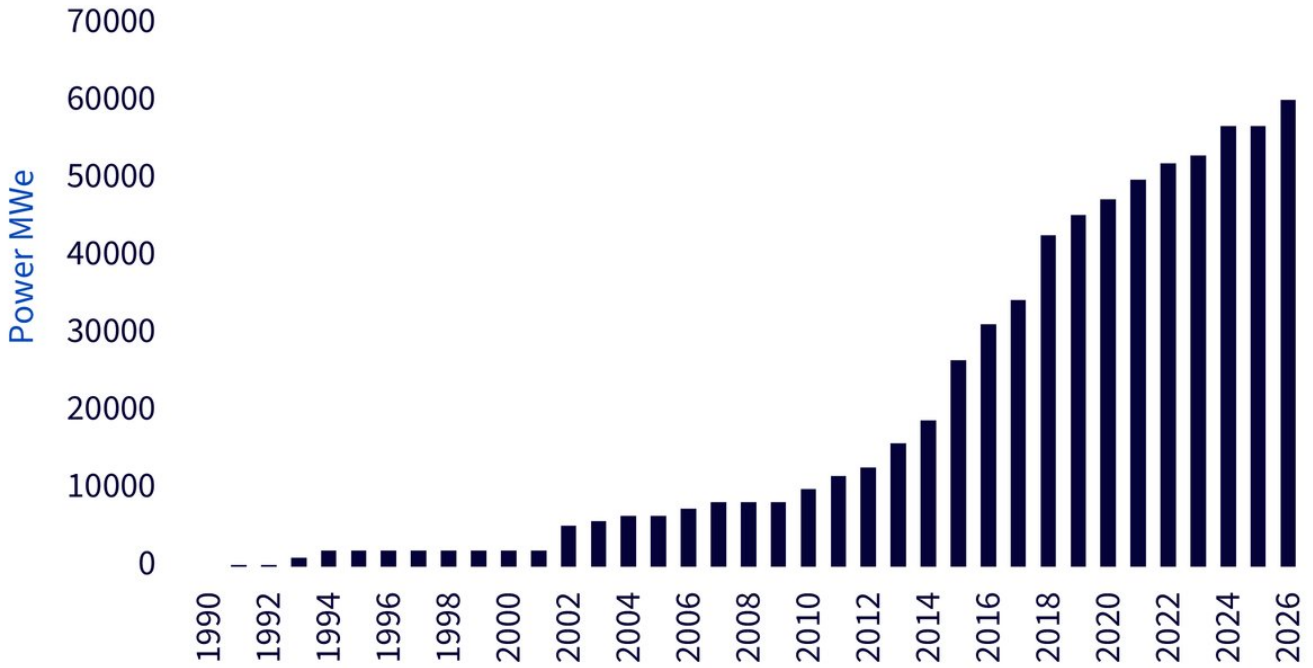
Source: World Nuclear Association, March 2026. MWe stands for megawatt electric.

The US is already making progress in returning to nuclear power. In April 2023, a new reactor, Vogtle 3, was connected to the grid, followed by Unit 4 in March 2024. Microsoft's deal with Constellation Energy to reopen Three Mile Island, the site of the 1979 accident which eventually shut down operations in 2019, is considered a symbol of the rebirth of nuclear energy. With hyperscalers investing heavily in artificial intelligence (AI) data centres in the US, nuclear energy is increasingly linked to the accompanying theme poised to grow.

The China effect

Technology companies have clearly played an important role by identifying nuclear energy as a solution for their power-hungry data centres. But the political will to take the nuclear option also seems to have been influenced by the realisation that China is doing something which the US seems to be ignoring.

Figure 2: China's operable nuclear capacity has increased 5x in 15 years



Source: World Nuclear Association, March 2026. MWe stands for megawatt electric.

Over the last 15 years, while the rest of the world has been switching its reactors off, China has been busy building new reactors, aggressively (see Figure 2). The country now operates 61 reactors, has 38 under construction (out of a total of 78 under construction globally), and has, to date, not shut down even one reactor3.

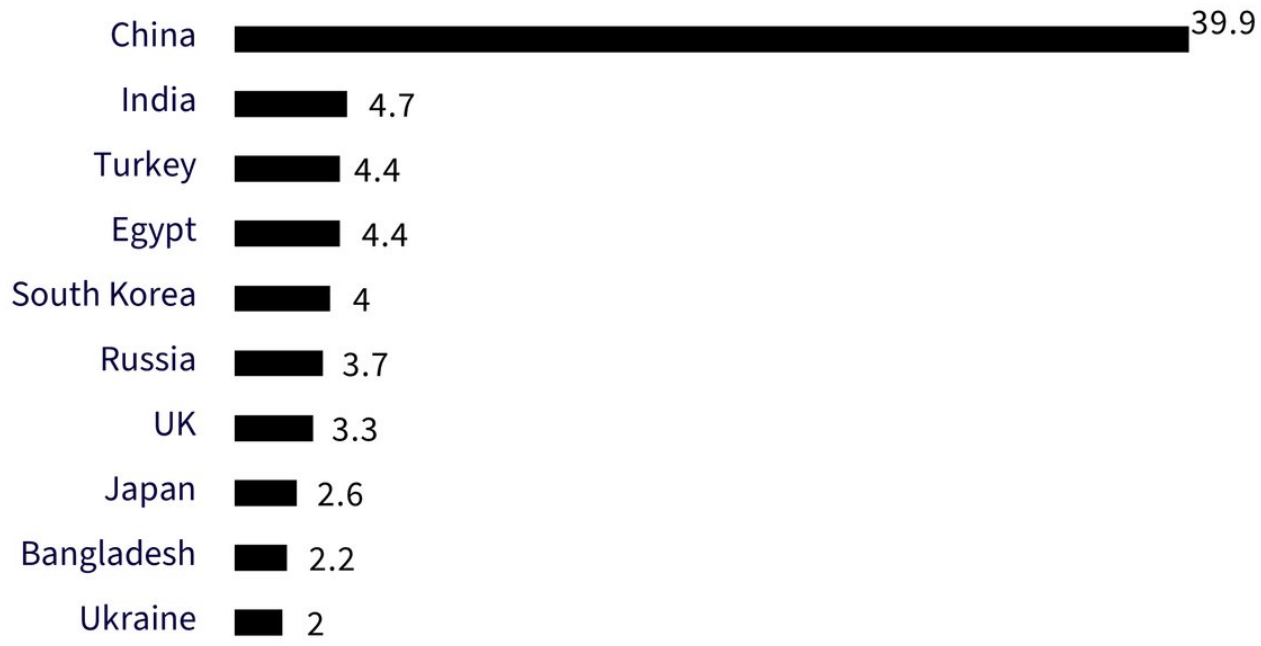
China has taken a manufacturing approach to nuclear energy. While other countries have often treated each project individually, resulting in delays and cost overruns, China has standardised designs, built domestic supply chains and built at scale. This production line approach, not just to the power plants but to the entire value chain, from the supply of fuel to components, is what has enabled such unprecedented acceleration in China's nuclear industry.

It has created a blueprint for other countries to follow. For the US, it has created a 'they're doing it and we aren't' moment.

It's not just about the US and China

The US and China clearly matter, however there are other players worth mentioning as well. If we look at the top 10 countries with the biggest pipelines for adding nuclear capacity, we see several Asian countries dependent on the import of oil and gas for power. Nuclear seems like the way forward to improve energy security and protect the environment.

Figure 3: Reactor capacity under construction (MWe)



Source: World Nuclear Association, March 2026. MWe stands for megawatt electric.

Among the top 10 is Japan. Japan seeing nuclear energy favourably again is significant because the 2011 Fukushima accident not only caused Japan to turn away from nuclear, it caused the rest of the world to do so as well. Up until 2011, Japan was generating 30% of its electricity from nuclear. The plan, back then, was for this to reach 40% by 2017. But with reactors being shut down, this target was abandoned. This is now changing again. The new target is at least 20% of electricity from nuclear by 2030. Japan has restarted 15 reactors, and a further 10 are in the process of getting approvals to resume operations. Two new reactors are under construction as well4.

This has clearly encouraged the world to pay attention. If Japan can return to nuclear energy, others can too.

Why this matters

Investors rightly ask, after a year like 2025 when stocks across the nuclear energy value chain did phenomenally well, whether the growth is already priced in. Have they missed the opportunity? At WisdomTree, we believe the roadmap for the world to triple its capacity (as already agreed by 38 countries5), or for the US to quadruple its capacity by 2050, simply cannot be priced in. The current pipeline, as shown in Figure 3, doesn't get us anywhere near tripling global capacity. This means the pipeline will expand. It also means that a lot remains uncertain in terms of which companies will be involved in which projects.

What we do know, however, is that capacity expansion at such scale will create opportunities across the value chain, from upstream uranium producers, to midstream providers of products and services to the nuclear industry, to innovators developing advanced technologies like SMRs.

Investors may consider exposure across the value chain and be on the lookout for attractive entry points, such as the one presented by recent market volatility. The case for nuclear continues to strengthen, supported by ongoing capacity buildout and growing policy backing. As countries increasingly incorporate nuclear into their energy mix, investors may wish to consider how this theme fits within their portfolios.

Nuclear energy investments are subject to risks including commodity price volatility, regulatory and policy changes, project execution risk and shifting public sentiment. As with all thematic investments, outcomes depend on a range of economic and geopolitical factors.

1 World Nuclear Association, March 2026.
2 World Nuclear News, November 2025.
3 World Nuclear Association, March 2026.
4 World Nuclear Association, March 2026.
5 Global declaration to triple nuclear capacity, United Nations, March 2026.

Important Risks Related to this Article

IMPORTANT INFORMATION

Marketing communications issued in the European Economic Area ("EEA"): This document has been issued and approved by WisdomTree Ireland Limited, which is authorised and regulated by the Central Bank of Ireland.

Marketing communications issued in jurisdictions outside of the EEA: This document has been issued and approved by WisdomTree UK Limited, which is authorised and regulated by the United Kingdom Financial Conduct Authority.

WisdomTree Ireland Limited and WisdomTree UK Limited are each referred to as "WisdomTree" (as applicable). Our Conflicts of Interest Policy and Inventory are available on request.

This marketing communication has been prepared for professional investors, but the WisdomTree products set out in this document may be available in some jurisdictions to any investors, subject to applicable laws and regulations. As the product may not be authorised or its offering may be restricted in your jurisdiction, it is the responsibility of every person or entity to satisfy themselves as to the full observance of the laws and regulations of the relevant jurisdiction. Prior to any application investors are advised to take all necessary legal, regulatory, tax and investment advice on the suitability and consequences of an investment in the products. Past performance is not a reliable indicator of future performance. Any historical performance included in this document may be based on back testing. Back testing is the process of evaluating an investment strategy by applying it to historical data to simulate what the performance of such strategy would have been. Back tested performance is purely hypothetical and is provided in this document solely for informational purposes. Back tested data does not represent actual performance and should not be interpreted as an indication of actual or future performance. The value of any investment may be affected by exchange rate movements. Any decision to invest should be based on the information contained in the appropriate prospectus and affer seeking independent investment, tax and legal advice. These products may not be available in your market or suitable for you. The content of this document does not constitute investment advice nor an offer for sale nor a solicitation of an offer to buy any product or make any investment.

An investment in exchange-traded products ("ETPs") is dependent on the performance of the underlying index, less costs, but it is not expected to match that performance precisely. ETPs involve numerous risks including among others, general market risks relating to the relevant underlying index, credit risks on the provider of index swaps utilised in the ETP, exchange rate risks, interest rate risks, inflationary risks, liquidity risks and legal and regulatory risks.

The information contained in this document is not, and under no circumstances is to be construed as, an advertisement or any other step in furtherance of a public offering of shares in the United States or any province or territory thereof, where none of the issuers or their products are authorised or registered for

distribution and where no prospectus of any of the issuers has been filed with any securities commission or regulatory authority. No document or information in this document should be taken, transmitted or distributed (directly or indirectly) into the United States. None of the issuers, nor any securities issued by them, have been or will be registered under the United States Securities Act of 1933 or the Investment Company Act of 1940 or qualified under any applicable state securities statutes.

This document may contain independent market commentary prepared by WisdomTree based on publicly available information. Although WisdomTree endeavours to ensure the accuracy of the content in this document, WisdomTree does not warrant or guarantee its accuracy or correctness. Any third party data providers used to source the information in this document make no warranties or representation of any kind relating to such data. Where WisdomTree has expressed its own opinions related to product or market activity, these views may change. Neither WisdomTree, nor any affiliate, nor any of their respective officers, directors, partners, or employees accepts any liability whatsoever for any direct or consequential loss arising from any use of this document or its contents.

This document may contain forward looking statements including statements regarding our belief or current expectations with regards to the performance of certain assets classes and/or sectors. Forward looking statements are subject to certain risks, uncertainties and assumptions. There can be no assurance that such statements will be accurate and actual results could differ materially from those anticipated in such statements. WisdomTree strongly recommends that you do not place undue reliance on these forward-looking statements.

WisdomTree Issuer ICAV

The products discussed in this document are issued by WisdomTree Issuer ICAV (“WT Issuer”). WT Issuer is an umbrella investment company with variable capital having segregated liability between its funds organised under the laws of Ireland as an Irish Collective Asset-management Vehicle and authorised by the Central Bank of Ireland (“CBI”). WT Issuer is organised as an Undertaking for Collective Investment in Transferable Securities (“UCITS”) under the laws of Ireland and shall issue a separate class of shares ("Shares”) representing each fund.

The Fund is described in a Key Information Document (KID) or Key Investor Information Document (KIID) for UK investors, and the prospectus of WT Issuer (“WT Prospectus”). A copy of the WT Prospectus and the KID / KIID is available, for EEA/UK only, in English at www.wisdomtree.eu. Where required under national rules, the KID will also be available in the local language of the relevant EEA Member State. Investors should read the WT Prospectus before investing and should refer to the section of the WT Prospectus entitled 'Risk Factors' for further details of risks associated with an investment in the Shares.

The summary of investor rights associated with an investment in the fund is available in English on WisdomTree Europe's website. WisdomTree Management Limited may decide to terminate the arrangements made for the marketing of its collective investment undertakings. In such circumstances, shareholders in the affected EEA Member State will be notified of this decision and will be provided with the opportunity to

redeem their shareholding in the fund free of any charges or deductions for at least 30 working days from the date of such notification.

For Investors in Switzerland:

This document constitutes an advertisement of the financial product(s) mentioned herein.

The prospectus (in English only) and the key investor information documents (KID) (in German, French and Italian) are available from WisdomTree's website: https://www.wisdomtree.eu/en-ch/resource-library/prospectus-and-regulatory-reports

For WisdomTree UCITS products only: the representative and paying agent of the ETPs in Switzerland is Société Générale Paris, Zurich Branch, Talacker 50, PO Box 5070, 8021 Zurich, Switzerland. The prospectus, the key investor information documents (KIID), the articles of association and the annual and semi-annual reports of the sub-funds are available free of charge from the representative and paying agent. As regards distribution in Switzerland, the place of jurisdiction and performance is at the registered seat of the representative and paying agent. Some of the sub-funds referred to in this document may not have been registered with the Swiss Financial Market Supervisory Authority ("FINMA"). In Switzerland, such sub-funds that have not been registered with FINMA may only be available to Qualified Investors.

For Investors in France:

The information in this document is intended exclusively for professional investors (as defined under the MiFID) investing for their own account and this material may not in any way be distributed to the public. The distribution of the Prospectus and the offering, sale and delivery of Shares in other jurisdictions may be restricted by law. WT Issuer is a UCITS governed by Irish legislation, and approved by the Financial Regulatory as UCITS compliant with European regulations although may not have to comply with the same rules as those applicable to a similar product approved in France. The Fund has been registered for marketing in France by the Financial Markets Authority (Autorité des Marchés Financiers) and may be distributed to investors in France. Copies of all documents (i.e. the Prospectus, the Key Investor Information Document, any supplements or addenda thereto, the latest annual reports and the memorandum of incorporation and articles of association) are available in France, free of charge at the French centralizing agent, Societe Generale at 29, Boulevard Haussmann, 75009, Paris, France. Any subscription for Shares of the Fund will be made on the basis of the terms of the prospectus and any supplements or addenda thereto.

For Investors in Malta: This document does not constitute or form part of any offer or invitation to the public to subscribe for

or purchase shares in the Fund and shall not be construed as such and no person other than the person to whom this document has been addressed or delivered shall be eligible to subscribe for or purchase shares in the Fund. Shares in the Fund will not in any event be marketed to the public in Malta without the prior authorisation of the Maltese Financial Services Authority.